

## METHOD AND SYSTEM FOR OPERATING AN EDGE ROUTER

### ABSTRACT OF THE DISCLOSURE

5           A method for operating an edge router in a network that provides multiple levels of service is provided. In response to receiving packets, the edge router determines a corresponding packet flow. An incremental utility for each packet is then calculated, and each packet is labeled as a function of the incremental utility. The packets are then  
10          forwarded to core routers in the network, where they are processed based on the labels. The incremental utility can be based on a utility function corresponding to the flow and intra-flow priorities associated with the packets.

A copy of the signed application is on file with the U.S. Patent and Trademark Office.